#### October 2006



# Optional System Proposal Arizona State Retirement System

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# NATURAL DESIGNATION OF THE PARTY OF THE PART

#### System Overview

- The System has been closed to new entrants since 1976 and now has approximately 200 non-retired members and 1,700 retirees
- Active employees and employers each contribute 7% of pay
- Accounts are credited with 8% interest plus supplemental credits that may be granted
- At retirement, account balance is converted to an annuity
- If funded status exceeds 105%, Board may increase benefits. If funded status declines below 95%, non-guaranteed benefits are reduced to restore funded status to 95%
- Benefits in the System are variable, but experience is that benefits only increase and that benefits are guaranteed



#### System Overview cont.

- ASRS System members previously have had voluntary opportunities to move from the "System" to the Defined Benefit "Plan"
  - In 1971, members had the opportunity to vote to transfer from the System to the Plan. More than 80% voted in favor of the transfer and the current Defined Benefit Plan was put in place
  - A second opportunity was available in 1975. It applied to all members who did not vote in 1971
- Since 1976, all new hires have been required to be Plan members



#### Concerns with System

- A declining population and increasing concentration of retirees subjects the System to greater volatility in funding status
- The portion of System benefits derived from investment earnings are subject to investment market risk
- An aging System population suggests that a more conservative asset allocation may be prudent at some point
- System funding surpluses may provide an opportunity to reduce the risk of the investment portfolio instead of increasing non-guaranteed benefits
- System members may be unprepared for the potential decrease in benefits that may occur, believing that benefits can only increase or that benefits are guaranteed

#### ■ Two Objectives:

- Heighten awareness among System members regarding the demographic and investment market risk inherent in their current benefits
- Offer System members a one-time voluntary choice to eliminate the risk in their current benefits

#### Proposed Solution:

- Inform System Members
- Offer a choice of a voluntary transfer from the System to the Plan with a reduction in the System benefit amount reflecting the risk the Plan would absorb for accepting the liability to pay guaranteed benefits

- Cost to convert the present System benefit to a guaranteed benefit under the Plan is derived using a formula that determines the liability of providing the guaranteed benefit
- The formula takes into account such factors as the member's age, account balance or system benefit and the overall funded status of the System at a future date
- It also takes into account the cost of Permanent Benefit Increases
   (PBIs) for the Plan benefit new transfers may receive
- Examples of the percentage of System benefit that would be transferred to the Plan and fully guaranteed are shown on the chart on the following slide (these are estimates only)

#### Sample Conversion Percentages\* (based upon the 6/30/2005 actuarial valuation report funded status of 107%) Age at Date of **Percentage of System Benefits** Conversion Transferred to the Plan and Guaranteed **50** 81.9% 55 83.8% 60 85.8% 65 87.3% **70** 89.9% **75** 92.6% 80 94.8% 85 97.5%

<sup>\*</sup>The sample conversion percentages will change depending on the funded status of the System, which will vary with investment performance, and other economic and demographic changes.



#### How Were These Percentages Determined?

#### 3 models were considered

- Annuity purchase portfolio to match liability
- Simulation no transfer of wealth
- Financial option pricing cost of accepting risk

Further adjusted for PBI

- Retired System members would be offered the following: No Change:
  - 1. Continue receiving System benefit with the understanding of the risks and their consequences on future benefits, OR

Additional Choices Under the Proposal:

- 2. Accept a reduction in the current benefit amount to convert to a guaranteed Plan benefit with no risk of further reduction, OR
- 3. Take a lump sum distribution and forfeit all rights of ASRS membership and benefits, including ASRS health insurance and health insurance premium benefit

Example for choices on next slide:

<u>Current Retiree – Sample Participant</u>		
Current Age	76	
Present Value of Current System Benefit	\$ 178,394	
Current Monthly System Benefit	\$1,571	
Annual 13th Check	\$5,829	

<sup>\*</sup>Based upon the 6/30/2005 actuarial valuation report and subject to change depending on the funded status of the System, which will vary with investment performance, and other economic and demographic changes.

Choices	Current Benefit	Proposal
1 – No Change Stay in System	\$1,571 Monthly Benefit	Converted Plan Benefit:
	\$5,829 Annual 13 <sup>th</sup> Check	\$ N/A
	Total: \$24,681 Annual	
2 – Take reduced benefit and transfer to Plan	\$1,571 Monthly Benefit	Converted Plan Benefit:
	\$5,829 Annual 13 <sup>th</sup> Check	\$1,912 monthly benefit (guaranteed)
	Total: \$24,681 Annual	No additional 13 <sup>th</sup> check
		Total: \$22,944 Annual
3 – Take lump sum withdrawal and forfeit all ASRS membership rights	\$1,571 Monthly Benefit	Lump Sum Amount:
	\$5,829 Annual 13 <sup>th</sup> Check	\$190,882
	Total: \$24,681 Annual	

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Choices for Active and Inactive System Members:

#### No Change:

- 1. Retire under the System, when eligible, with the understanding of the risks and their consequences on future benefits, OR
- 2. Retire under the Plan with a guaranteed benefit, OR
- 3. Withdrawal of contributions and forfeiture of all benefits\* at termination OR

#### Additional Choices Under the Proposal:

- 4. Accept a reduction in the System benefit amount to convert to a guaranteed Plan benefit with no risk of further reduction, including future accruals under the Plan, OR
- 5. Take a lump sum distribution at retirement and forfeit all benefits\*

<sup>\*</sup>Forfeit all ASRS membership rights & benefits, including health insurance, health insurance premium benefit and long term disability plan.

#### **Example for following slide:**

#### **Estimate:**

Retire under the System at future date (age 60 with 5 years of service or age 65)

Sample Member Current Age 58.54
Average Monthly Salary \$5,712
Current Service 35.8
Current System Account Balance (ee/e

Current System Account Balance (ee/er/sc) \$1,021,064

Projected Monthly System Benefit \$ 14,796 at age 65

Projections assume 8% return on System assets each year, which is not guaranteed.

Future retirement age assumed to be 65 for this illustration.



# Optional System Proposal Options for Non-Retired Members

Choices	Current Benefit	Proposal
1 – Retire under System	Estimated Monthly Benefit at 65: \$14,796 (\$177,552 Ann.)	No Change
	13 <sup>th</sup> Check	
2 – Retire under Plan	Estimated Plan Benefit at 58: \$4,703 (\$56,436 Ann.)	No Change
	at 65: \$5,552 (\$65,624 Ann.)	
3 – At termination or	Forfeiture Amount:	No Change
retirement, withdraw contributions (EE/ER/SC)	\$1,021,064	
4 – Convert System benefit to Plan now and take future	System Benefit at age 65: \$14,796 (\$177,552 Ann.)	Converted Benefit at age 65:
accruals under Plan		\$12,598 (\$151,176 Ann.)
5 – If eligible, retire and take a lump sum D=distribution of converted benefit	System Benefit at age 65: \$14,796 (\$177,552 Ann.)	Lump Sum at Retirement: \$1,092,560



# Proposed Roll-Out Process & Timeline Dates are approximate and subject to change

- July 21, 2006 Present valuation model and roll-out process recommendation to Board
- October and November 2006 Outreach meetings to System members to gather feedback and assess whether or not there is support among System members

#### The following activities are based upon System member support:

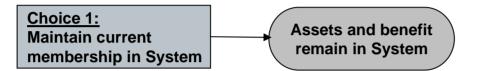
- November, 2006 Draft and refine proposed legislation based on response from members; Make final presentation to Board
- January, 2007 Potential legislative initiative
- September, 2007 Statute enacted, if successful
- October, 2007 Recalibrate conversion factors based on 6/30/2007 actuarial valuation
- October through December, 2007 Notify System members with individualized information
- January through March, 2008 System members make choice
- Effective date of transfer April 1, or July 1, 2008

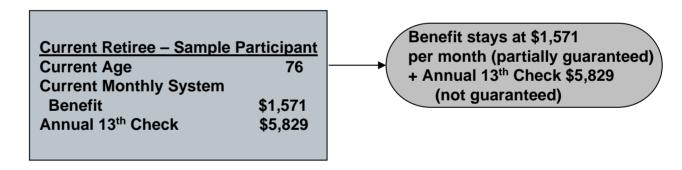
### Optional System Proposal Appendix and Illustrations

■ Information following this page is to provide detailed examples for each of the options offered to retired and non-retired members.



# Optional System Proposal Illustration of Choice #1 for Current Retirees

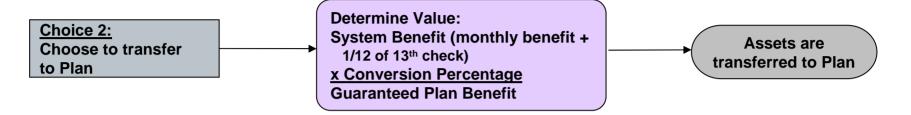


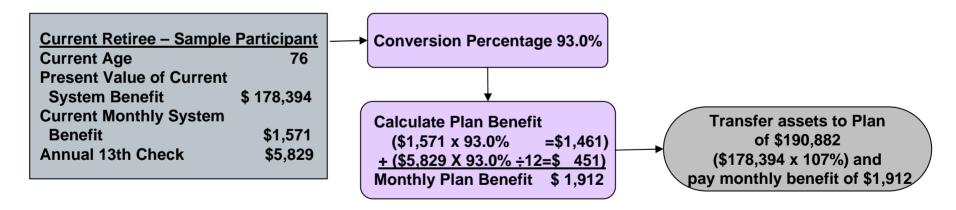


<sup>\*</sup>Based upon the 6/30/2005 actuarial valuation report and subject to change depending on the funded status of the System, which will vary with investment performance, and other economic and demographic changes.



## Optional System Proposal Illustration of Choice #2 for Current Retired Members

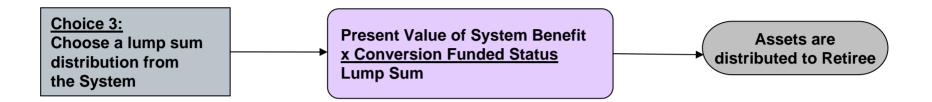


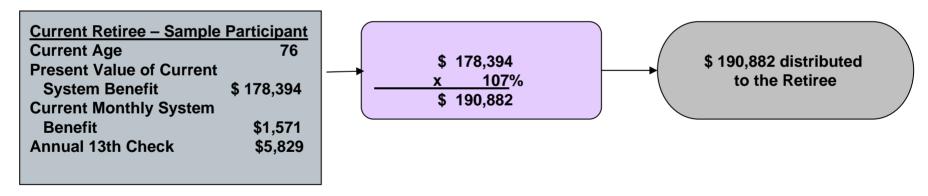


<sup>\*</sup>Based upon the 6/30/2005 actuarial valuation report and subject to change depending on the funded status of the System, which will vary with investment performance, and other economic and demographic changes.



# Optional System Proposal Illustration of Choice #3 for Current Retired Members





<sup>\*</sup>Based upon the 6/30/2005 actuarial valuation report and subject to change depending on the funded status of the System, which will vary with investment performance, and other economic and demographic changes.

#### **Example for following slide:**

#### **Estimate:**

Retire under the System at future date (age 60 with 5 years of service or age 65)

Sample Member Current Age 58.54 Average Monthly Salary \$5,712 Current Service 35.8

Current System Account Balance (ee/er/sc) \$1,021,084

Projected Monthly System Benefit \$ 14,796 at age 65

Projections assume 8% return on System assets each year, which is not guaranteed.

Future retirement age assumed to be 65 for this illustration.



# Optional System Proposal Illustration of Choice #1 for Non-Retired Members

#### **Choice 1:**

Retire under the System at future date (when eligible)

No change in choice; same option available currently

#### Example:

#### **Estimate:**

Retire under the System at future date (age 60 with 5 years of service or age 65)

Sample Member Current Age 58.54 Average Monthly Salary \$5,712 Current Service 35.8

Current System Account Balance (ee/er/sc) \$1,021,084

Projected Monthly System Benefit

\$ 14,796 at age 65

Projected benefit is \$14,796 at age 65, not fully guaranteed

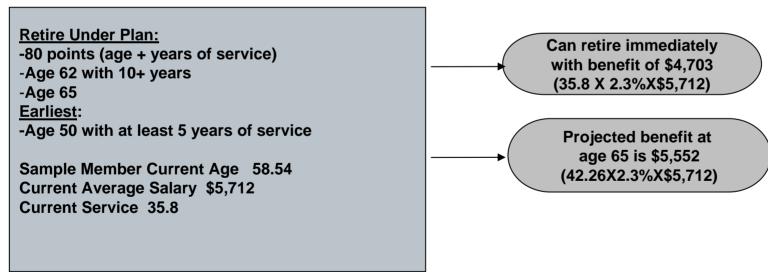
Projections assume 8% return on System assets each year, which is not guaranteed.

Future retirement age assumed to be 65 for this illustration.

## Optional System Proposal Illustration of Choice #2 for Non-Retired Members

Choice 2:
Retire under the Plan
at future date when eligible

No change in choice; same option available currently





# Optional System Proposal Illustration of Choice #3 for Non-Retired Members

#### **Choice 3:**

Withdrawal of contributions from the System upon termination

No change in choice; same option available currently

#### Example:

#### Estimate:

Current age 63.7 with 10 years of service Employee contributions + Interest

+ Percentage of (employer contributions + interest + supplemental credit based on years of service)

**Employer Contribution Vesting Schedule** 

0.0-5.0 years = No employer monies

5.0-6.0 years = 25%

6.0-7.0 years = 40%

7.0-8.0 years = 55%

8.0-9.0 years = 70%

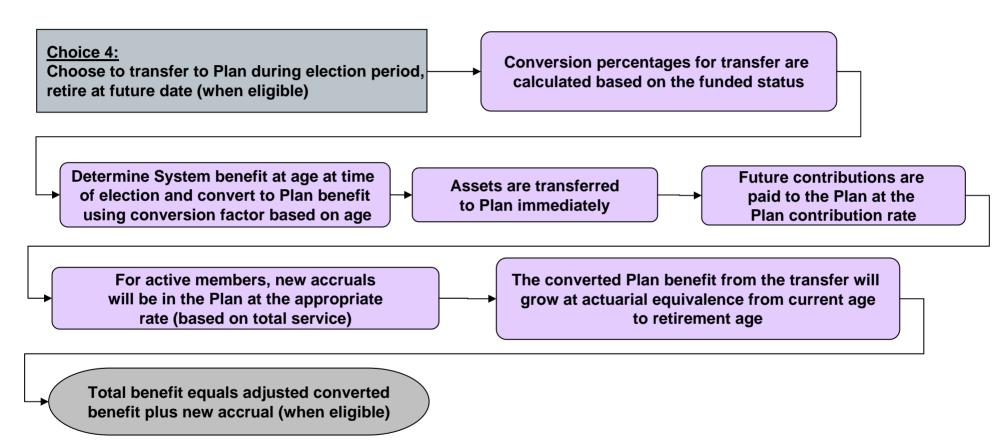
9.0-10 years = 85%

**10 or more years = 100%** 

\$ 225,000 (Employee) + 796,084 (Employer) \$1,021,084 Distributed to member

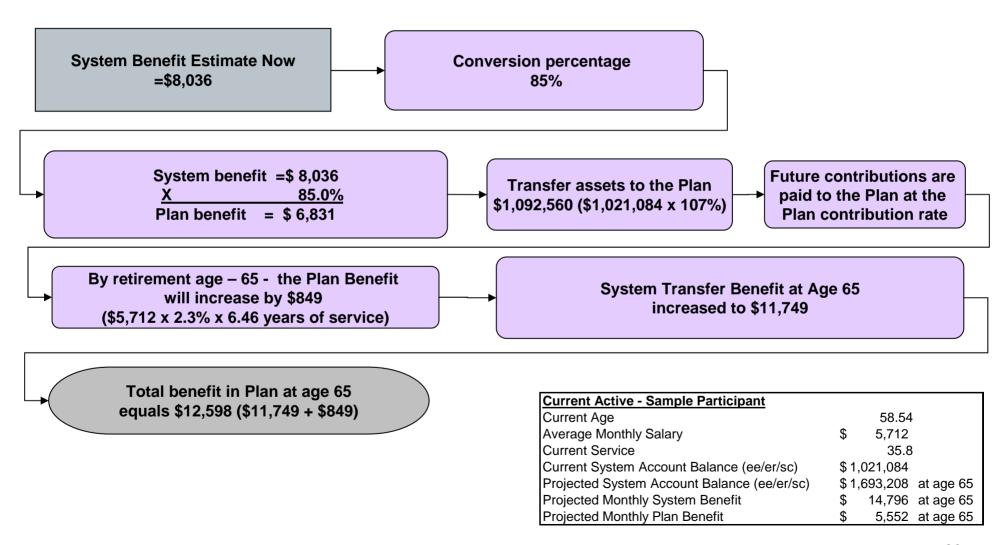


## Optional System Proposal Illustration of Choice #4 for Non-Retired Members



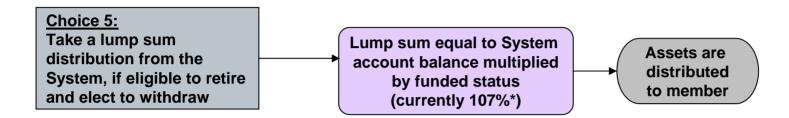


# Optional System Proposal Sample Calculation for Choice #4 for Non-Retired Members





# Optional System Proposal Illustration of Choice #5 for Non-Retired Members





<sup>\*</sup>Funded status as of 6/30/2005